Listing of Claims:

1. (Currently Amended) In a system comprised of a plurality of objects, a method for maintaining consistent copies of the objects, comprising the steps of:

~~applying~~ providing a plurality of ~~plurality of~~ consistency policies including at least a first and second consistency policy, wherein each consistency policy specifies how to reconcile multiple versions of an object ~~in which application of at least one consistency policy results in different system performance than a second consistency policy~~;

~~selecting a consistency policy from the plurality of consistency policies for an object, wherein the selection is made to improve system performance such that, the consistency policy selected for the object is selected based on a balance between consistency level and performance~~

selectively applying the first consistency policy to achieve a degree of consistency above a consistency level at a first overhead;

selectively applying the second consistency policy to achieve a degree of consistency below the consistency level at a second overhead which is less than the first overhead, to thereby achieve greater system performance by reducing the overhead for maintaining consistency.

2. (Currently Amended) The method as recited in claim 1, wherein the plurality of consistency policies comprise ~~at least one consistency policy includes~~ an update-all consistency policy, ~~and the second consistency policy includes~~ an update-holders consistency policy, a coordinate-all consistency policy, or a coordinate-holders consistency policy.

3. (Cancelled)

4. (Original)   The method as recited in claim 1, further comprising including in the plurality of consistency policies strong and weak consistency policies.

5. (Previously presented) The method as recited in claim 1, further comprising including in the plurality of consistency policies a strong consistency policy under at least one condition but a weak consistency policy if the at least one condition is not met.

6. (Original) The method as recited in claim 1, further comprising a step of managing the plurality of consistency policies using a consistency coordinator.

7. (Currently Amended) The method as recited in claim 1, <u>further comprising</u> ~~wherein the step of~~ selecting <u>a consistency policy for an object is performed</u> ~~is performed~~ by an application, ~~which writes~~ <u>that updates</u> the object.

8. (Original) The method as recited in claim 1, wherein an object has a lifetime and the method further comprises a step of switching a consistency policy of the object during the object's lifetime.

9. (Original) The method as recited in claim 1, further comprising steps of:
measuring activity of a consistency coordinator, which manages the consistency policies in the system; and
maintaining connections with caches in the system in accordance with the activity of the consistency coordinator.

10. (Original) The method as recited in claim 9, further comprising communicating the activity of the consistency coordinators to the caches.

11. (Original) The method as recited in claim 10, wherein the step of communicating the activity comprises sending heartbeat messages to the caches.

12. (Currently Amended) The method as recited in claim 1, <u>further comprising</u> ~~wherein the step of selecting includes~~ choosing a consistency policy for at least one object [,] which maximizes system performance.

13. (Original) The method as recited in claim 12, wherein system performance is maximized by adjusting at least one of CPU overhead, communication latency and message overhead.

14. (Original) The method as recited in claim 1, wherein a consistency policy of at least one object is specified as a condition in terms of a temporal or semantic state of the object.

15. (Original) The method as recited in claim 1, wherein the consistency policy is selected from at least one of always strong consistency, conditional strong consistency, weak consistency with guarantees, and weak consistency.

16. (Original) The method as recited in claim 1, further comprising one of differentiating and prioritizing communication between a cache and a consistency coordinator by a cache device.

17. (Original) The method as recited in claim 16, further comprising maintaining at least two queues in the cache to hold messages communicated to the consistency coordinator.

18. (Original) The method as recited in claim 17, further comprising the step of prioritizing messages in one queue with a higher priority than messages in another queue.

19. (Original) The method as recited in claim 16, further comprising the step of maintaining a number of connections by a cache which is dynamically varied depending upon a load on the consistency coordinator.

20. (Currently Amended) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for a method for maintaining consistent copies of ~~the~~ an object, the method steps comprising:
~~applying~~ providing a plurality of plurality of consistency policies including at least a first and second consistency policy, wherein each consistency policy specifies how to reconcile multiple versions of an object ~~in which application of at least one consistency policy results in different system performance than a second consistency policy~~;

-4-

~~selecting a consistency policy from the plurality of consistency policies for an object, wherein the selection is made to improve system performance such that, the consistency policy selected for the object is selected based on a balance between consistency level and performance~~

selectively applying the first consistency policy to achieve a degree of consistency above a consistency level at a first overhead;

selectively applying the second consistency policy to achieve a degree of consistency below the consistency level at a second overhead which is less than the first overhead, to thereby achieve greater system performance by reducing the overhead for maintaining consistency.

21. (Canceled)

22. (Currently Amended) The method as recited in claim ~~2~~1, further comprising ~~a step of~~ adjusting a level of consistency for at least one object in response to consistency overhead.

23. (Currently Amended) The method as recited in claim ~~2~~1, wherein an object _that is_ managed using ~~one of~~ expiration time, update all, update holders, ~~and~~ _or_ deferred invalidation consistency becomes managed using strong consistency.

24. (Currently Amended) The method as recited in claim ~~2~~1, wherein an object _that is_ managed using strong consistency becomes managed using one of update all, update holders, and deferred invalidation consistency.

25. ~ 43. (Canceled)

44. (Currently Amended) A system for maintaining consistent copies _of objects,_ comprising:

a plurality of caches for storing objects;

~~each cache comprising at least two queues, which designate an update priority of the object included in each queue;~~

a plurality of consistency policies maintained throughout the system_, the consistency_ _policies_ including at least a first and second consistency policy, wherein each consistency policy

specifies how to reconcile multiple versions of an object stored in one or more of the plurality of caches ~~such that at least one consistency policy results in different performance than a second consistency policy~~; and

a ~~coordination~~ consistency coordinator having selective communication with the caches, which selectively applies the first consistency policy to achieve a degree of consistency above a consistency level at a first overhead and which selectively applies the second consistency policy to achieve a degree of consistency below the consistency level at a second overhead which is less than the first overhead, to thereby achieve greater system performance by reducing the overhead for maintaining consistency ~~manages requests for updates from the caches in accordance with the queue priority.~~

45. (Currently Amended) The system as recited in claim 44, wherein the plurality of consistency policies comprise an ~~one consistency policy includes~~ update-all consistency policy, an ~~and a second policy includes~~ update-holders consistency policy, a coordinate-all consistency policy, or a coordinate-holders consistency policy.

46. (Canceled)

47. (Original) The system as recited in claim 44, wherein the plurality of consistency policies includes strong and weak consistency policies.

48. (Previously Presented) The system as recited in claim 44, wherein the plurality of consistency policies includes a strong consistency policy for an object under at least one condition but a weak consistency policy for the object if the at least one condition is not met.

49. (Currently Amended) The system as recited in claim 44, further comprising an application that updates an object and which selects, ~~which writes the object, for selecting~~ the consistency policy for an object.

50. (Original) The system as recited in claim 44, further comprising a number of connections between the consistency coordinator and the caches wherein the number is adjusted

in accordance with activity of the consistency coordinator.

51. (Original) The system as recited in claim 50, wherein the activity of the consistency coordinator is communicated to the caches.

52. (Original) The system as recited in claim 50, wherein the activity is communicated with heartbeat messages to the caches.

53. (New) In a system comprised of a plurality of objects, a method for maintaining consistent copies of the objects, comprising the steps of:
providing a first consistency policy, where a consistency policy specifies how to reconcile multiple versions of an object, wherein the first consistency policy updates an object for which multiple copies exist by sending out at least one message to invalidate a copy of the object and waiting for an acknowledgement that the invalidation message has been received before assigning a new value to the object;
providing a second consistency policy which updates an object without waiting for an acknowledgement that a message to invalidate a copy of the object has been received;
selectively applying the first consistency policy to achieve a degree of consistency above a consistency level at a first overhead; and
selectively applying the second consistency policy to achieve a degree of consistency below the consistency level at a second overhead which is less than the first overhead, to thereby achieve greater system performance by reducing the overhead for maintaining consistency.

54. (New) The system of claim 44, wherein each cache comprises at least two queues, which designate an update priority of the object included in each queue; wherein the consistency coordinator manages requests for updates from the caches in accordance with the update priority of a cached object and a consistency policy currently applied for the cached object.